CALIFORNIA ENVIRONMENTAL QUALITY ACT
SPECIAL INITIAL STUDY

THE CALTRANS VARIANCE REQUEST RELATED TO HANDLING AND REUSE OF LOW-LEVEL LEAD-CONTAMINATED SOILS ON CERTAIN STATE-OWNED HIGHWAY RIGHTS-OF-WAY WITHIN CALTRANS DISTRICTS 4, 6, 7, 8, 10, 11, AND 12

The Department of Toxic Substances Control (DTSC) has completed the following Special Initial Study for this project in accordance with the California Environmental Quality Act (§ 21000 et seq., California Public Resources Code) and implementing Guidelines (§ 15000 et seq., Title 14, California Code of Regulations). This Special Initial Study has also been used to satisfy the requirements of § 711.4, Fish and Game Code and § 753.5, Title 14, Code of California Regulations relating to filing of environmental fees.

I. PROJECT INFORMATION

Project Name: California Department of Transportation (Caltrans)

Site Location: The activities authorized by variance will be located within existing state owned highway rights within Caltrans Districts 4, 6, 7, 8, 10, 11, and 12. (See Exhibits 1 and 2)

Contact Person:
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Project Description:

I. Introduction

The California Department of Toxic Substances Control (DTSC) is proposing to issue a variance that would allow the California Department of Transportation (Caltrans) Districts 4, 6, 7, 8, 10, 11, and 12 to excavate, stockpile, transport, and reuse soil contaminated with low concentrations of aerially-deposited lead on transportation projects within specified transportation corridors. The Caltrans activities would take place on state-owned highway rights-of-way within Caltrans Districts 4, 6, 7, 8, 10, 11, and 12. (See Exhibit 1). The variance would be issued in accordance with Health and Safety Code (HSC), section 25143 and Title 22 California Code of Regulations (22 CCR), section 66260.210.

Caltrans has sampled the sediment adjacent to traffic lanes in major metropolitan areas and has determined that lead from leaded gasoline emissions is present. Elevated lead levels have been found to be highest at the surface (zero to six inches) and decrease with depth. Levels are highest adjacent to the traveled way and decrease with distance. On average, total lead levels are not greater than the Total Threshold Limit Concentration (TTLC) but exceed the Soluble Threshold Limit Concentration (STLC) found in 22 CCR.

During freeway improvements, soil or sediment is removed to a depth of two feet to allow installation of the structural section that supports the road. The excavation process generates large quantities of excess soil that may be routinely reused within the project or other construction projects or may be relinquished to the contractor to dispose of as fill. Once the soil is excavated, and if it exceeds the STLC, it is considered a hazardous waste under California Standards. The material is not classified as hazardous under the federal Resource Conservation and Recovery Act (RCRA) and does not exceed the Threshold Concentration Leaching Potential (TCLP) test limits for lead.

Caltrans has requested a variance from the storage, transportation and land disposal requirements of 22 CCR Sections 6264.250 et seq., 66268.1 et seq., 66262.40 (b) and (c) and 66262.41 (b). Excavation, stockpiling, transportation, and use of the soil would be managed within guidelines approved by DTSC.

Traditionally, Caltrans has relinquished most excess project soils to the contractor for disposal. However, Caltrans cannot relinquish soils that are considered hazardous waste, such as soils with hazardous levels of lead, even if the levels are barely above the criteria defining the waste as hazardous.

Normally, wastes that meet California criteria for hazardous wastes are either hauled to permitted disposal sites or treated to reduce their hazardous component. Hauling of these low levels of lead-contaminated soils to a Class I disposal facility would be very costly, approximately $150-250 per cubic yard.

DTSC, Office of Scientific Affairs (OSA), reviewed soil sampling data, health and safety monitoring data, and the Caltrans program, and determined that material can be managed on-site so that there is no significant threat to human health or the environment. OSA later reaffirmed that finding. The letter from the OSA is attached as Exhibit 3.

If this variance is not approved, the soil excavated from the Caltrans construction activities cannot be reused on-site and would thus require disposal at Class 1 hazardous waste disposal facilities. A single Caltrans project generates as much as 20,000 cubic yards of soil. The limited Class 1 landfill capacity available in California could be filled by wastes from normal Caltrans construction projects.

II. Project Description and Location

Variance Proposal

Caltrans has requested a variance from DTSC for certain maintenance, repair, and construction projects in Caltrans Districts 4, 6, 7, 8, 10, 11, and 12. Caltrans is requesting a variance from the storage and land disposal requirements of 22 CCR Sections 66264.25 et seq., 66268 et seq., 66262.40 (b) and (c) and 66262.41 (b) that would allow Caltrans to collect and reuse soil contaminated with low levels of lead on state owned highway rights-of-way road improvement projects. Caltrans would use the requested variance for its proposed road improvement projects in District 4, 6, 7, 8, 10, 11, and 12. (See Exhibit 2). A list of project locations is included in Exhibit 4. These project locations are individually subject to CEQA when Caltrans approves projects for detailed design and construction.

In response to heavy travel loads, many highways and freeways are being improved by Caltrans to increase vehicle capacity and travel safety. The improvement of existing roads allows increased vehicle use without the significant additional cost of purchasing additional rights-of-way that would be needed for a new freeway or roadway alignment. Roadway improvement projects may include filling in existing median areas, widening out over the existing highway shoulders or a combination of widening in these areas. Often, the

widening of the driving surface of freeways is associated with the reconstruction and upgrading of bridges and interchanges. Construction of the widening normally requires development of a two to three-foot thick subbase to carry the new widened lanes and their associated traffic. To allow development of the subbase, existing soils are normally excavated and removed as part of the project construction.

Caltrans has discovered low levels of aerially-deposited lead existing on unpaved median and shoulder areas of some of its roadways. The lead contamination is believed to come from the use of leaded gasoline and fuels that were used for many years by the state's driving population. Testing indicates the soil shows elevated lead levels compared to ambient non-highway environments, but normally not above the 1000 mg/kg TTLC hazardous waste criteria as defined in 22 CCR section 66261.24. While the total lead levels are normally not a concern, a significant number of samples, particularly in the top 6 inches of soil, have shown soluble lead levels in excess of 22 CCR criteria of 5.0 mg/l STLC. The low levels of aerially-deposited lead are normally found within 30 feet of the edge of pavement and are concentrated in the top 6 inches (if present) with lesser amounts down to a depth of two to three feet.

With DTSC variance approval, soils identified as containing low levels of lead (total or soluble) that are excavated for the improvement of transportation corridors would be reused within the transportation corridor in accordance with variance conditions. It is anticipated that a variety of methods will be identified for the reuse of these soils. Currently, Caltrans has envisioned its use in embankments, and widening and flattening thereof; use as backfill for structures, retaining walls, trenches and depressions resulting from the removal of obstructions; as road base fill; contouring of fill areas; raising grades e.g., Park & Ride lots; and the placement of soils under the traveled way. Additional uses of these soils may be identified as Caltrans designs more projects with reuse of these soils in mind. Attached are two examples of proposed methods for the placement of lead-containing soils within the project as sub-base and fill area behind a retaining wall (See Exhibit 5). These plans are conceptual examples, and do not necessarily apply directly to specific projects in District 4, 6, 7, 8, 10, 11, and 12.

1. Proposed Storage Lifetime

The placement of low-level lead-contaminated soils within the embankments, fills, and subsurface structures of the freeway facilities is envisioned to be a long-term storage of these soils. Normally a highway has a design life of 30 years, however, many roadways now have life spans in excess of 30 years, with some newer freeways being designed for 50 year life spans. At the end of the facility design life span the facility will normally be upgraded (widened and resurfaced) or maintained as is for the foreseeable future. Very rarely are high-occupancy alignments abandoned.

2. Management Practices

The following describes handling methods used from the point of generation to placement or storage of the soils:

A. Clearing and Grubbing:

Clearing and grubbing of the construction area is generally performed in advance of excavation and grading operations. This work consists of clearing all vegetable growth, such as trees, logs, upturned stumps, roots of down trees, brush, grass, weeds, and all other objectionable material, including concrete or masonry, within the highway construction areas. Unless otherwise specified, the entire length of the project is cleared. Dirt, sediment, or soil clinging to this material are separated at the location of removal.

B. Excavation:

Selected soil excavation consists of excavation involved in the grading and construction of the roadway. Soils with lead contamination will be defined in the plans as material that is excavated from an identified location within the right-of-way, as shown on the plans or specified in the special provisions of each contract.

Excavation is done to grade tolerance and can vary no more than .05 foot to .1 foot above or below the grade established by the Engineer and/or plans. With contaminated soils, excavation operations will be conducted in such a manner that haul vehicles will not travel over the contaminated soils. During excavation the contractor must comply with all the requirements set forth in Divisions 11,12,13,14, and 15 of the Vehicle Code. Equipment will normally include graders, scrapers, front end loaders, dump trucks, and tractor/trailer trucks.

C. Hauling:

When practicable, the contaminated soil will be hauled directly from excavation point to its final position where it will be placed and compacted to meet roadway compaction specifications. Any spillage resulting from hauling operations along or across the traveled way will be removed immediately by the contractor. As shown on the plans, vehicles will be loaded within the limits of excavation. When loaded, no soil will extend above the sides or rear of the vehicle. Vehicles will be covered during the haul.

In some instances, primarily due to construction restrictions, it may not be practical to place contaminated soil directly into its final placement point. In these cases, the soil will be stockpiled in a designated area while waiting for placement on the project.

D. Dust Control:

This work consists of applying either water or dust palliative, or both, for the alleviation or prevention of dust. Dust resulting from the performance of the work, either inside or outside the right-of-way, shall be controlled by the contractor. Water for use in the work may be potable or non-potable. If the contractor uses reclaimed waste water in the work, the sources and discharge of reclaimed waste must meet the California Department of Health Services water reclamation criteria and the Regional Water Quality Control Board requirements. The standard and special provisions of each contract specifically address and inform the contractor of the need for stringent dust control measures. In addition, Caltrans must comply with any local air district's fugitive dust control rules for construction activities.

E. Erosion Control:

Where erosion of soil may cause water pollution due to the nature of the soil or the season of the year, the contractor shall install permanent erosion control features concurrently with or immediately following grading and or placement operations. Soil derived from roadway work will not be deposited in stream channels or where it would be washed away by stream flows. Soil will not be allowed to drift onto pavement. Erosion control plans from the contractor are mandated by the standard specifications. Special provisions of each contract for covering or protecting stockpiles of these soils will be included in contracts where immediate placement of these soils is not possible.

F. Ultimate Disposition of Waste:

Contaminated soil will be placed in embankments, placed in general fill areas, behind retaining walls, and below pavement or shoulder sections. Compaction, lifts, and moisture will depend on final placement location. Placement and compaction will conform to standard provisions "Earthwork" and "Aggregate Sub-base". Contaminated soil will be used as shown on the construction plans or specified in the special provisions of each contract. Contaminated soil not used as a specific layer will be placed in the roadway prism in accordance with standard contract provisions for placing embankment soil or structure backfill.

When contaminated soils are shown on the plans or designated in the special provisions of each contract as a specified layer, spreading and compacting the soil shall conform to standard aggregate sub-base provisions.

3. Operational Procedures

Under the heading of public safety, the contractor is required to provide site security in all contracts. These provisions include conforming to all OSHA requirements, lighting for night work, signs, traffic control, flagging, maintaining and/or providing fencing, temporary railing, and barricades.

A. Site security:

Fencing on each freeway project will change depending on the site conditions and the presence or absence of sound walls. Caltrans uses barbed wire fence, wire mesh fence and chain link fence. Barbed wire and wire mesh fences consist of five lines of barbed wire or wire mesh and three lines of barbed wire. Both types are fastened to metal posts or wood posts. The required fencing is specified in each contract. The contractor is required to maintain fencing and site security during the course of the contract and is responsible for preventing damage and repairing damaged features.

When the following conditions exist, the general contractor is required to install a temporary railing between any lane carrying public traffic and any excavation, obstacle or storage area:

1. Excavations. Any excavation near the edge that is 12 feet or less from the edge of the lane, except:

a. Excavations covered with sheet steel or concrete covers of adequate thickness to prevent accidental entry by traffic or the public.

b. Excavations less than one foot deep.

c. Trenches less than one foot wide for irrigation pipe or electrical conduit or excavations less than one foot in diameter.

d. Excavations parallel to the lane for the purpose of pavement widening or reconstruction.

e. Excavations in side slopes, where the slope is steeper than 4:1.

2. Storage Areas. Whenever material or equipment is stored within 12 feet of the lane and such storage is not otherwise prohibited.

Except for installing, maintaining and removing traffic control devices, whenever work is performed or equipment is operated in the work areas, the contractor must close the adjacent traffic lane unless otherwise provided in the specifications. These closures are based on traffic speed. When traffic speeds are over 45 miles per hour, as would be expected on a freeway, and work is within 6 feet of a traffic lane, the adjacent lane must be closed.

B. Inspection Schedule:

The Resident Engineer (RE) and her/his designated inspectors provide constant overview and authority on the following: all questions relating to the work performed, all questions that may arise as to the interpretation of the plans and specifications, and, all questions as to the acceptable fulfillment of the contract on the part of the contractor. Her/his decisions are final and she/he has the authority to enforce and make effective such decisions and orders that the contractor fails to carry out promptly. A project log is maintained by the RE detailing any decisions and/or variations from the contract requirements. Estimated quantities and location of contaminated soils will be recorded by the RE as part of the project documentation.

Before the start of work, the contractor designates in writing, an authorized representative who has the authority to act for the contractor. The representative must be present at the site of work at all times while work is actually in progress on the contract. When work is not in progress, or during periods when work is suspended, arrangements are made for any emergency work that may be required.

The Caltrans RE has, at all times, safe access to the work during its construction. All work done and all materials used are subject to her/his inspection. Projects financed in whole or part by Federal funds are subject to inspection at all times by the Federal agency involved.

Preparedness and Prevention Requirements:

1. Equipment:

For each contract, the contractor identifies each piece of equipment, other than hand tools, by means of an identifying number plainly stenciled or stamped on the equipment at a conspicuous location, and furnishes to the RE a list giving the description of each piece of equipment and its identifying number. The make, model number, and empty gross weight of each unit of compacting equipment are stamped or stenciled on the unit. The gross weight is either the manufacture's rated weight or the scale weight. All meters and scales are identified, rated, and marked.

Certain specifications may provide that equipment of a particular size and type is to be used to perform portions of the work. The contractor may request in writing, permission to use equipment of a different size or type in place of the equipment specified. The contractor may be required to furnish evidence the equipment proposed is capable of producing work equal to, or better than, that which can be produced by the equipment specified.

2. Communications:

Caltrans' vehicles are equipped with two-way radios with the radio base being the construction office. The radio is monitored by office personnel while vehicles are in the field.

3. Backup Contract:

Caltrans has a Construction Emergency Contract with 12 (this number will vary by year) contractors who are able to mobilize within 24 hours. This contract is available to perform right-of-way clearance of hazardous materials found during construction.

4. Prevention of Reaction of Ignitable, Reactive and Incompatible Wastes:

The contaminant of concern is lead in soil. The lead appears to be present due predominately to vehicle emissions. Lead is non-reactive in this form. The presence of lead is determined prior to construction using a site investigation contract. If other elements or chemicals are suspected during this investigation, additional testing is done to identify and quantify these materials. Any soils identified as hazardous waste due to other elements or chemicals outside of those identified in the variance, will be managed and disposed of at a waste facility authorized to accept such waste.

If the contractor encounters unexpected materials that she/he suspects to be hazardous, the construction emergency contract can be used to investigate and identify constituents and concentrations. Removal and disposal of hazardous waste can be done by the construction emergency contractor.

5. Contingency Plan:

Contingencies to handle truck spills of soil with lead, dust control, erosion control, and unidentified waste have been discussed in previous sections.

6. Personnel Training and Safety:

Personnel training and safety are part of Caltrans' program and are required of the contractor in the special provisions of each contract. Caltrans has developed and provided training on the presence of lead in soil along the right-of-way to construction personnel. This class addressed the health risks associated with lead, the levels of lead present in soil next to the right-of-way, the personnel air monitoring conducted on contractor and Caltrans personnel and the monitoring results. Regulatory requirements and waste management issues unique to lead-contaminated soil were also addressed.

The Caltrans safety office develops policy and guidance for construction. The office has a Certified Industrial Hygienist on contract to provide air monitoring and assistance to the Districts in dealing with exposure to lead.

D. Contractors:

The Standard Specifications require that the contractor conform to all applicable occupational safety and health standards, rules, regulations, and orders established by the State of California. The special provisions of each contract provide a material handout to the contractor that gives the testing results for the contract area. The special provisions of each contract then list the Title 8, section 1532.1 requirements for

health and safety related to construction projects with lead. The contractor is required to inform and train her/his personnel as required by this section. The contractor is required to develop a compliance plan, approved by a certified industrial hygienist, before beginning field work in areas with lead and submit this plan to the RE.

It is the contractor's responsibility to provide for the safety of traffic and the public during construction. In the standard provisions, this requirement is traffic related. The special provisions of each contract require dust control and air monitoring to ensure that dust control measures are effective. Air monitoring is also conducted to meet project specific Air Quality Management District permit requirements.

III. Environmental Setting

The variance would be implemented within the right-of-way of State highways in urbanized and some rural areas where construction projects are planned to widen roads, add high occupancy vehicle lanes, change interchange configurations, construct sound walls, add Park & Ride facilities and install pumping plant facilities to control surface drainage. These are planned projects funded through local, state, and federal transportation improvement programs and are being constructed for traffic improvement and safety reasons.

The highway corridors are state-owned property in the urban areas of Caltrans District 4 (San Francisco Bay Area), Caltrans District 6 (Fresno, Kern, Kings, Madera, and Tulare Counties), Caltrans Districts 7, 8, and 12 (Los Angeles Basin) Caltrans District 10 (Alameda, Amador, Calaveras, Merced, San Joaquin, and Stanislaus Counties) and Caltrans District 11 (San Diego metropolitan area). The properties are generally two to eight-lane concrete or asphalt-paved corridors and are fenced for access control. Shoulders and median areas may be paved or composed of graded fill or native sedimentary soils. Soils underlying traveled lanes are generally composed of graded fills and base soil aggregate for structural support.

Surface drainage is controlled by sloping of lanes to direct rain runoff to medians, shoulders, and then drain inlets or side ditches. Drainage control is necessary to prevent damage to the pavement structure and for safety purposes. Drainage inlets may lead to pumping plants that lift water to storm drains or directly into storm drains. For parking lots, drainage is directed to drainage inlets. Drainage inlets are grated to prevent entry and keep trash and debris out as much as possible.

Shoulder areas or dirt areas are normally planted with landscaping or erosion control plant material that may include ground covers, shrubs and trees.

Lighting is normally provided in urban areas and at interchange or overhead sign locations.

IV. Regulatory Background

It is premature to provide specific information about sites where this variance will be implemented. Such information is not yet available on a broad scale that covers the seven Caltrans Districts. Specific site information has been or will be generated for each individual project that has undergone or will undergo a separate CEQA assessment. In addition to CEQA conformity, other agency permits and approvals are still necessary and are neither circumvented nor preempted by the issuance of the variance. Each future highway project will be required to secure all necessary permits and approvals from the appropriate resource agencies, e.g., California Department of Fish and Game, the Regional Water Quality Control Board, the local Air Quality Management Districts, the State Historic Preservation Office of the California Department of Parks and Recreation, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Federal Highway Administration, etc.

V. Consistency with Existing Zoning, Plans, and Other Applicable Land Use Controls

The activities allowed by this variance would be conducted within certain existing state-owned right-of-way transportation corridors located in Districts 4, 6, 7, 8, 10, 11, and 12. These areas are designated for transportation. Therefore, the variance activities associated with the transportation projects would be consistent with this designation.

VI. Persons who Prepared and Participated in the Initial Study

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Document Repository Listing For
Caltrans Variance Request Related To Handling And Reuse Of Low-level Lead-contaminated Soils On Certain State Owned Highway Rights Of Way Within Caltrans Districts 4, 6, 7, 8, 10, 11, And 12.

1. Name and address of project sponsor:

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Julia Turney
California Department of Transportation
1120 N Street
Sacramento, California 95814

2. Name and address of organization financially responsible for the project:
California Department of Transportation, Districts 4, 6, 7, 8, 10, 11, and 12

Caltrans District 4
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Caltrans District 6
Central Valley
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Caltrans District 7
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Caltrans District 11
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Caltrans District 12
Orange Co.
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3. Person to be contacted regarding this project:
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4. Lead Agency
Department of Toxic Substances Control
Hazardous Waste Management Program
Permitting Division
400 P Street, Fourth Floor
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Sacramento, California 95812-0806

5. Document References

6. Locations
a. Draft Variance
b. Draft Negative Declaration
c. Fact Sheet

Information Desk
Caltrans OFFICES

Agencies Having Jurisdiction Over the Project/ Types of Permits Required:

II. DISCRETIONARY APPROVAL ACTION BEING CONSIDERED BY DTSC

G Initial Permit Issuance	**G** Removal Action Plan
G Permit Renewal	**G** Removal Action Workplan
G Permit Modification	**G** Interim Removal
G Closure Plan	**[X] Other (Specify)**
G Regulations	**Variance**

Program/ Region Approving Project:

Hazardous Waste Management Program
Permit Streamlining Branch
Permit Program Development Section

Contact Person/ Address/ Phone Number:

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III. ENVIRONMENTAL CONDITIONS POTENTIALLY AFFECTED

The boxes checked below identify environmental factors which were found in the following ENVIRONMENTAL SETTING/IMPACT ANALYSIS section to be potentially affected by this project, involving at least one impact that is "Potentially Significant" or "Potentially Significant Unless Mitigated".

G Earth	**G** Risk of Upset	**G** Aesthetics
G Air	**G** Transportation/ Circulation	**G** Cultural/ Paleontological Resources
G Surface and Groundwater	**G** Public Services	**G** Cumulative Effects
G Plant Life	**G** Energy	**G** Population
G Animal Life	**G** Utilities	**G** Housing
G Land Use	**G** Noise	**G** Recreation
G Natural Resources	**G** Public Health and Safety	**[X] None Identified**

IV. ENVIRONMENTAL SETTING/ IMPACT ANALYSIS

The following pages provide a brief description of the physical environmental conditions which exist within the area affected by the proposed project and an analysis of whether or not those conditions will be potentially impacted by the proposed project. Preparation of the Environmental Setting and Impact Analysis sections follows guidance provided in the DTSC's Workbook For Conducting Initial Studies Under the California Environmental Quality Act (CEQA), October 1996 (Workbook).

This Special Initial Study also contains evidence to support the claim that this project will have absolutely no adverse impact on fish or wildlife or the habitat that on which the fish or wildlife depend pursuant to the provisions of Title 14, CCR § 753.5 (d). Areas of special concern to fish and wildlife are highlighted within the appropriate environmental factor in the following section. A list of references used to support the following discussion and analysis are contained in Attachment A and are referenced within each environmental factor discussed below.

Mitigation measures which are made a part of the project (e.g.: permit condition) or which are required under a separate Mitigation Monitoring Plan which either avoid or reduce impacts to a level of insignificance are identified in the analysis within each environmental factor.

1. Earth

Description of Environmental Setting:

The variance would be implemented within the right-of-way of State highways in urbanized and some rural areas where construction projects are planned to widen roads, add high occupancy vehicle lanes, change interchange configurations, construct sound walls, add Park & Ride facilities and install pumping plant facilities to control surface drainage. These are planned projects funded through local, state, and federal transportation improvement programs and are being constructed for traffic improvement and safety reasons.

The highway corridors are state-owned property in the urban areas of Caltrans District 4 (San Francisco Bay Area), Caltrans District 6 (Fresno, Kern, Kings, Madera, and Tulare Counties), Caltrans Districts 7, 8, and 12 (Los Angeles Basin) Caltrans District 10 (Alameda, Amador, Calaveras, Merced, San Joaquin, and Stanislaus Counties) and Caltrans District 11 (San Diego metropolitan area). The properties are generally two to eight-lane concrete or asphalt paved corridors and are fenced for access control. Shoulders and median areas may be paved or composed of graded fill or native sedimentary materials. Materials underlying traveled lanes are generally composed of graded fill and base material aggregate for structural support.

Surface drainage is controlled by sloping of lanes to direct rain runoff to medians, shoulders, and then drain inlets or side ditches. Drainage control is necessary to prevent damage to the pavement structure and for safety purposes. Drainage inlets may lead to pumping plants that lift water to storm drains or directly into storm drains. For parking lots, drainage is directed to drainage inlets. Drainage inlets are grated to prevent entry and keep trash and debris out as much as possible.

Ref: Variance Application

Analysis of Potential Impacts:

[Analysis must include the following concerns: 1) Changes to any riparian land or wetlands under state or federal jurisdiction?; 2) Changes to soil required to sustain habitat for fish and wildlife?]

All activities allowed by this variance will be conducted within existing highway rights-of-way in which substantial earthwork activity has already occurred. In concert with the road projects that are subject to individual environmental review, the lead-contaminated soil will be used in accordance with the variance conditions for embankments, widening and flattening, backfill for structures, retaining walls, trenches and depression, roadbase fill, placement under new roads, and raising grades. Dirt and erosion control measures will be implemented during earthwork activities. Dust will be controlled by water or dust palliative or both. Any spillage resulting from hauling operations along or across the traveled way will be immediately removed by the contractor. When vehicles are loaded, no lead-contaminated soil will extend above the sides or rear of the vehicle and will be covered during the haul. Caltrans will require the contractor to install permanent erosion control features concurrently with or immediately following grading and or placement operations. The excavation or placement of lead-contaminated soil will not be within or adjacent to stream channels or 100-year floodplains except to the extent that road construction activities in those areas have been separately evaluated and approved under CEQA, and necessary mitigation or preventative measures applied. In addition, the activities will not occur on or adjacent to any riparian areas or wetlands, again with the exception of cases where, after separate project level evaluation under CEQA and other applicable law, it is determined that necessary mitigation or preventative measures will be applied.

As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to earth other than those mentioned above and these impacts will be evaluated during the project-specific environmental review.

Ref: Variance Application

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	*[X]*	***G***

2. Air

Description of Environmental Setting:

As indicated under Item 1, dust control measures will be implemented during earthwork activities. Dust will be controlled by water or dust palliative or both. When vehicles are loaded, no soil will extend above the sides or rear of the vehicle and will be covered during the haul to the placement site. Refer also to items 8 and 14.

Standard construction contract provisions direct the contractor to meet dust control requirements. The Caltrans projects will also be subject to local Air Quality Management Districts' regulations to control dust emissions.

Ref: Variance Application

Analysis of Potential Impacts:

[Analysis must address the following concerns: Degradation of any air resources which will individually or cumulatively result in a loss of biological diversity among the plants and animals residing in that air?]

The issuance of the variance will allow reuse of lead-contaminated soil within existing state-owned highway rights-of-way for various projects undertaken by Caltrans Districts 4, 6, 7, 8, 10, 11, and 12. As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to air because the dust control measures outlined above and in the Project Description ensure there are no substantive changes to air quality.

Ref: Variance Application

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	*[X]*	***G***

3. Surface and Ground Water

Description of Environmental Setting:

The excavation or placement of lead-contaminated soil will take place within existing highway rights-of-way. The activities allowed by this variance will not be within or adjacent to stream channels, other bodies of water, or 100-year floodplains, except where approved after separate project level evaluation under CEQA and other applicable law, with application of appropriate mitigation or preventive measures.

To prevent contaminated run-off, the Caltrans contractor will be required to install permanent erosion control features concurrently with or immediately following grading and or placement operations. Special provisions for covering or protecting stockpiles of lead-contaminated soil will be included in contracts where immediate placement will not take place. Any spillage resulting from hauling operations along or across the traveled way will be removed immediately by the contractor.

Lead is relatively insoluble in soils at near-neutral pH levels. Sampling by Caltrans has found pH levels of 6 to 8 in roadside soil, which are near neutral pH levels. While the lead is in soil, it possesses physical and chemical characteristics that render it insignificant as a hazard to human health and safety, livestock, and wildlife. When it leaches out into water, however, it may have certain adverse effects. Therefore, based on the risk assessment prepared by DTSC, the variance conditions require the following actions specifically for groundwater and surface water protection as described below:

a) Caltrans shall manage all soil contaminated with lead with contaminant concentrations such that it is considered a hazardous waste pursuant to HSC 25117 and 22 CCR, Div 4.5, Chapter 11 as hazardous waste unless the contaminant concentrations and management practices meet the following conditions:

1. Soil containing 500 ug/l extractible lead or less (based on a modified waste extraction test using deionized water as the extractant) and 350 ppm or less total lead may be used as fill provided that the lead-contaminated soil is placed a minimum of five (5) feet above the maximum water table elevation and covered with at least one (1) foot of nonhazardous soil. The limit on total lead within shall be the following: Total parts per million (ppm) lead shall be at or below the statutory limits in effect when the soil is re-used or the risk-based limit of 1496 mg/kg, whichever is less. On the effective date of this variance, HSC section 25157.8 limits total lead concentrations to 350 ppm. That section may be amended and/or expire in the future. Additionally, other parts of relevant statutes may be added or amended in the future to include lead limits applicable to this variance.

2. Soil containing more than 500 ug/l and less than 50 mg/l extractible lead (based on a modified waste extraction test using deionized water as the extractant) and 350 or less ppm total lead may be used as fill provided that the lead-contaminated soils are placed a minimum of five (5) feet above the maximum water table elevation and protected from infiltration by a pavement structure which will be maintained by Caltrans. Caltrans shall comply with the lead limits discussed in paragraph a) 1 above.

3. Contaminated soil with a pH < 5.0 shall only be used as fill soil under the paved portion of the roadway.

b) Caltrans will implement appropriate health and safety procedures to protect its employees and the public, and to prevent or minimize exposure to potentially hazardous substances. A project-specific health and safety plan must be prepared and implemented. The monitoring and exposure standards shall be based on Construction Standards in Title 22, CCR section 1532.1.

c) All lead-contaminated soil that cannot be buried and covered within the same Caltrans corridor from where it originated shall be managed as a hazardous waste.

d) Lead-contaminated soil will not be moved outside the designated corridor boundaries (see paragraph q) below).

e) Lead-contaminated soil shall not be buried in areas where it will be in contact with groundwater or surface water.

f) Lead-contaminated soil shall be buried and covered only in locations that are protected from erosion resulting from storm water run-on and run-off.

g) The lead-contaminated soil shall be buried and covered in a manner that will prevent accidental or deliberate breach of the asphalt, concrete, and/or cover soil.

h) The presence of lead-contaminated soil will be incorporated into the projects' as-built drawings. The as-built drawings shall be annotated with the location, representative analytical data, and volume of lead-contaminated soil. The as-built drawings shall also state the depth of the cover. These as-built drawings shall be retained by Caltrans until its rights-of-way or property ownership are relinquished.

I) Caltrans shall ensure that no other wastes, other than the lead-contaminated soil, are placed in the burial areas.

j) Lead-contaminated soil shall not be buried within ten (10) feet of culverts or locations subject to frequent worker exposure.

k) Excavated lead-contaminated soil not placed into the designated area (fill area, roadbed area) by the end of the working day shall be stockpiled and covered with sheets of polyethylene or at least one foot of non-hazardous soil. The lead-contaminated soil, while stockpiled or under transport, shall be protected from contacting surface water and being dislodged or transported by wind or storm water. The stockpile covers shall be inspected at least once a week and within 24 hours after rainstorms.

l) Caltrans shall ensure that all stockpiling of lead-contaminated soil remains within the specified corridor. Stockpiling of lead-contaminated soil outside the area of contamination is in direct violation of land disposal restrictions and is prohibited.

m) Caltrans shall conduct confirmatory sampling, if appropriate, of any stockpile area after removal of the lead-contaminated soil to ensure that contamination has not been left behind or has not migrated from the stockpiled soil to the surrounding soils. Caltrans shall ensure that test results are kept with Caltrans project records located at the District office or a subsequent permanent location and are available to DTSC upon request.

n) Caltrans shall stockpile lead-contaminated soil only on high ground (i.e. no sump areas or low points) which will not be affected by surface water run-on or run-off.

o) Caltrans shall not stockpile lead-contaminated soil in an environmentally sensitive area.

p) Caltrans shall ensure that run-off which has come into contact with stockpiled lead-contaminated soil will not flow to storm drains, inlets, or waters of the state.

q) Caltrans may move lead-contaminated soil from one Caltrans project to another Caltrans project so long as the lead-contaminated soil remains within the same designated Caltrans corridor. Caltrans shall record this movement of lead-contaminated soil by using a bill of lading. The bill of lading must contain: 1) US DOT description including shipping name, hazard class and ID number; 2) handling codes; 3) quantity of soil; 4) volume of soil; and 5) any specific handling instructions. The bill of lading shall be referenced in and kept on file with the project's as-built drawings. Lead-contaminated soil must be kept covered during transportation.

r) For each specific corridor where this variance is to be implemented, all of the following information will be submitted in writing to DTSC at least five (5) days before construction of any project begins:

1. a plan drawing designating the boundaries of the corridor where lead-contaminated soils will be excavated, stockpiled, buried and covered;

2. a list of the Caltrans projects that the corridor encompasses;

3. a list of Caltrans contractors that will be conducting any phase of work on any project affected by this variance;

4. duration of corridor construction;

5. location where sampling and analytical data used to make lead concentration level determinations are kept (e.g. a particular Caltrans project file);

6. name and phone number (please include area code) of project resident engineer;

7. location where Caltrans and contractor health and safety records are kept;

8. location of project special provisions (including page or section number) for soil excavation, transportation, stockpile, burial and placement of cover material;

9. location of project drawings (including drawing page number) for soil excavation, burial and placement of cover in plan and cross section (For example, "The project plans are located at the resident engineer's office located at Th and Main Streets, City of Fresno,. See pages xxxx of contract xxxx");

10. If a Caltrans project within the corridor is added, changed or deleted, Caltrans must update the information provided to DTSC five (5) days before construction begins; and

11. The type of environmental document for each project, date of adoption, and where the document is available for review. Prior to finalizing the environmental document for a project, Caltrans shall comply with the following:

A. A copy of Notice of Exemption for any project shall be submitted to the DTSC Headquarters Project Manager within five (5) days of signing.

B. A copy of the initial study and any proposed Negative Declaration or environmental impact report for any project shall be submitted to the DTSC. Headquarters Project Manager at the beginning of the formal public notice period, the current name, address and phone number can be obtained from the Chief of DTSC's Permitting Division, as specified below.

C. A copy of the Notice of Preparation for any project shall be submitted to DTSC.

s) Changes in location of lead-contaminated soil placement, quantities or protection measures (field changes) will be noted in the resident engineer's project log within five (5) days of the field change.

t) Caltrans shall ensure that field changes are in compliance with the requirements of this variance.

u) If areas subject to the terms of this variance are sold, relinquished or abandoned (including roadways), all future property owners shall be notified in writing in advance by Caltrans of the requirements of this variance, and Caltrans shall provide the owner with a copy of the variance. A copy of such a notice shall be sent to DTSC. and contain the corridor location and project. Caltrans shall also disclose to the new owner the location of areas where lead-contaminated soil has been buried. Future property owners will be subject to the same requirements as Caltrans. DTSC retains the right to modify or revoke this variance pursuant to HSC 25143 upon a change of ownership or at any other time.

Ref: Variance Application

Analysis of Potential Impacts:

[The analysis must address the following concerns: 1) Changes to riparian land, rivers, streams, watercourses and wetlands under state and federal jurisdiction?; or 2) Changes to any water resources which will individually or cumulatively result in a loss of biological diversity among the plants and animals residing in that water?]

The issuance of the variance will allow reuse of lead-contaminated soil within existing state-owned highway rights-of-way for various projects undertaken by Caltrans Districts 4, 6, 7, 8, 10, 11, and 12. As explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase. There are no anticipated significant impacts to surface and groundwater other than those mentioned above and these impacts will be evaluated during the project-specific environmental review. Additionally, variance conditions will require measures specifically for groundwater and surface water protect.

Ref: Variance Application

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	*[X]*	***G***

4. Plant Life

Description of Environmental Setting:

Since most of the individual projects are either lane widenings, additions of lanes in freeway medians, or interchange and intersection modifications, the construction projects will be almost entirely within the existing Caltrans rights-of-way. Accordingly, critical or sensitive habitats or agricultural areas will not be affected by any activities allowed under this variance.

Ref: Variance Application

Analysis of Potential Impacts:

[The analysis must address the following concerns: 1) Any adverse effect to native and non-native plant life?; 2) Effects to rare and unique plant life and ecological communities dependent on plant life?; 3) Any adverse effect to listed threatened and endangered plants?; 4) Effects on habitat in which listed threatened and endangered plants are believed to reside?; 5) Effects on species of plants listed as protected or identified for special management in the Fish and Game Code, the Public Resources Code, the Water Code, or regulations adopted thereunder?; or 6) Effects on marine and terrestrial plant species subject to the jurisdiction of the Department of Fish and Game and the ecological communities in which they reside?]

There are no anticipated significant impacts to plant life for these project. Any possible impacts to these resources will be addressed separately in detail when each individual reuse project is being developed by the Caltrans district project manager.

Ref: Variance Application

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	*[X]*	***G***

5. Animal Life

Description of Environmental Setting:

As previously stated under Item 4, most of the individual projects are either lane widenings, additions of lanes in the freeway medians, or interchange and intersection modifications. The construction projects will be almost entirely within the existing Caltrans rights-of-way. Accordingly, critical or sensitive habitats will not be affected by any activities allowed under this variance. In addition, any possible impacts to these resources will be addressed separately, in detail, as each individual reuse project is developed by the Caltrans district project manager.

Ref: Variance Application

Analysis of Potential Impacts:

[The analysis must address the following concerns: 1) Effects on listed threatened or endangered animals?; 2) Effects on habitat in which listed threatened and endangered animals are believed to reside?; 3) Effects on species of animals listed as protected or identified for special management in the Fish and Game Code, the Public Resources Code, the Water Code, or regulations adopted thereunder?; or 4) Effects on marine and terrestrial animal species subject to the jurisdiction of the Department of Fish and Game and the ecological communities in which they reside?]

There are no anticipated significant impacts to plant life for these project. Any possible impacts to these resources will be addressed separately in detail when each individual reuse project is being developed by the Caltrans district project manager.

Ref: Variance Application

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	*[X]*	***G***

6. Land Use

Description of Environmental Setting:

All activities allowed by this variance would take place on existing state-owned highway rights-of-way within Caltrans Districts 4, 6, 7, 8, 10, 11, and 12. These areas will continue to be designated as transportation corridors in the future. The variance activities will be consistent with this use. There are no land use changes associated with the Project.

Ref: Variance Application

Analysis of Potential Impacts:

All activities allowed by this variance would take place on existing state-owned highway rights-of-way within Caltrans Districts 4, 6, 7, 8, 10, 11, and 12. There are no anticipated significant effects or changes to land use.

Ref: Variance Application

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	*[X]*	***G***

7. Natural Resources

Description of Environmental Setting:

Materials such as asphalt and concrete will be used in the road projects at each proposed location. This variance will allow Caltrans to also reuse soils contaminated with low concentrations of lead for these projects within the highway rights-of-way. If the variance was not approved, the soils excavated from the Caltrans construction activities could not be reused onsite and thus would require disposal at Class I hazardous waste disposal facilities.

Ref: Variance Application

Analysis of Potential Impacts:

This project will not result in use of any natural resources other than already present. There are no anticipated significant impacts to natural resources.

Ref: Variance Application

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	*[X]*	***G***

8. Risk of Upset

Description of Environmental Setting:

The variance will allow Caltrans to excavate, stockpile, transport, and reuse soil contaminated with low concentrations of aerially-deposited lead on transportation projects within State-owned existing highway rights-of-way.

The presence of lead will be determined prior to construction using a site investigation contract. If other elements or chemicals are suspected during this investigation, additional testing is done to identify and quantify these materials. Any soils identified as hazardous waste due to elements or compounds other than lead will be managed and disposed of at a waste facility authorized to accept such waste.

If the contractor encounters unexpected materials that she/he suspects are hazardous, the construction emergency contract can be used to investigate and identify constituents and concentrations. Removal and disposal of hazardous waste must be done by the construction emergency contractor.

Contingencies plans are required to handle truck spills of lead-contaminated soil, control dust and erosion, and properly deal with unidentified waste as discussed in above paragraph and also under Items 1,2, and 3.

Ref: Variance Application

Analysis of Potential Impacts:

The activities posed under the variance are not expected to have any significant effects on the environment. Management activities, operation plans, an inspection program, emergency plans, and employee training requirements help ensure safe conditions during operations.

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	*[X]*	***G***

9. Transportation/Circulation

Description of Environmental Setting:

The variance would apply to individual projects in highway and freeway corridors where construction projects will be completed to widen roads, add lanes, change interchange configurations, add Park & Ride facilities, and install pumping plant facilities to control surface drainage. These projects are part of the State Transportation Improvement Program or other transportation funding programs and are being conducted for traffic improvement and safety reasons.

Excavation will be needed because of the types of construction projects implemented. Projects where vehicle lanes are being added, sound walls constructed, interchanges modified or equipment installed will necessitate excavations. Traffic weight requires removal of native soil and replacement with aggregate base and subbase material. In some cases, the native soil can be treated to be reused. No extra excavation would occur other than that which is necessary for normal construction.

The variance would apply to two general categories of soil reuse. These activities would temporarily add truck traffic to an existing highway. Since the variance activities will be conducted in concert with projects that are either lane widenings, additions of high occupancy vehicle lanes in the freeway medians, or interchange modifications which will be located in existing developed rights-of-way, it is unlikely that there will be any significant impacts to transportation or circulation caused by approval of the variance.

In the first category, the need for fill soil is balanced by the amount of soil to be excavated. The project design shows where soil will be excavated and where it will be placed. Placement of fill would occur in embankments, interchanges, structural backfill, raised grades under Park & Ride lots, and under paved lanes or shoulders.

The second category of projects is those jobs where soil must be imported from outside the project boundaries, but within the highway corridor or connecting corridor. New interchange projects or improvements to large interchanges may need several thousand cubic yards of soil. Soil from many areas may be moved to a single location. Soil may also be moved to interchanges where space with restricted access is available to place extra soil.

Ref: Variance Application

Analysis of Potential Impacts:

Since the variance activities will be conducted in concert with projects that are either lane widenings, additions of high occupancy vehicle lanes in the freeway medians, or interchange modifications which will be located in existing developed rights-of-way, it is unlikely that there will be any significant impacts to transportation or circulation. However, any effects to these resources will be addressed specifically when each individual reuse project is being developed by Caltrans.

Ref: Variance Application

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	*[X]*	***G***

10. Public Services

Description of Environmental Setting:

The variance will allow Caltrans to use lead-contaminated soil on road projects within specified corridors within state owned highway rights-of-way.

Ref: Variance Application

Analysis of Potential Impacts:

Activities allowed by this variance will not have an effect upon or result in a need for new or altered governmental services so there are no significant impacts to public services.

Ref: Variance Application

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	***G***	*[X]*

11. Energy

Description of Environmental Setting:

The issuance of the variance and its implementation by Caltrans will not impact the total energy usage of the individual projects. Instead, the variance will enable Caltrans to conduct its normal construction activities, subject to the terms and conditions of the variance.

Ref: Variance Application

Analysis of Potential Impacts:

Implementation of the separate transportation projects will require the consumption of energy during the construction period and for maintenance operations. Because the reuse of lead-contaminated soil would likely use less energy (fuel) than hauling the lead-contaminated soil to a Class I landfill and hauling any new soil to the project sites, less fuel overall may be consumed. There are therefore no significant impacts to energy use.

Ref: Variance Application

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	***G***	*[X]*

12. Utilities

Description of Environmental Setting:

The allowed activities of the variance will not result in the need for new systems or substantial alteration to any utilities. The variance will be implemented on freeway corridors where construction projects will be completed to widen roads, add high occupancy vehicle lanes, change interchange configurations, add Park & Ride facilities and install pumping plant facilities to control surface drainage.

Ref: Variance Application

Analysis of Potential Impacts:

Because this project (the reuse of lead-contaminated soil) will not require the development of additional utilities, there are no significant impacts.

Ref: Variance Application

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	***G***	*[X]*

13. Noise

Description of Environmental Setting:

The construction activities would temporarily generate noise. The contractor would be required to comply with all local noise control regulations and ordinances. Additionally, each transportation project will be constructed in conformance with the appropriate local general plan noise elements. Issuance of the variance will not impact the normal excavation and soil transportation work activities associated with the highway project. Prior to the construction of the individual projects, all sensitive noise receptors will be identified and noise measurements will be taken at the most representative sites.

Feasible and reasonable noise mitigation will be considered for all locations for which the predicted noise levels approach or exceed the noise abatement criteria of 67 dBA (Leq), specified by the U.S. Federal Highway Administration as the maximum allowable noise level for residential areas. Mitigation will be in accordance with the Caltrans Highway Design Manual (Chapter 1100) and the U.S. Federal Highway Administration noise abatement procedures as provided in the Code of Federal Regulations (23 CFR 772).

Ref: Variance Application

Analysis of Potential Impacts:

The approval of the variance will not increase noise level above normal highway construction level that would occur if the lead-contaminated soil was not reused. The reuse of lead-contaminated soil may create less noise than that which would be generated from vehicles hauling lead-contaminated soil to a Class I landfill. Because noise mitigation measures will automatically be considered for the construction projects, it is not anticipated that there be any significant impacts caused by the issuance of the variance.

Ref: Variance Application

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	*[X]*	***G***

14. Public Health and Safety

Description of Environmental Setting:

The variance will allow Caltrans to excavate, stockpile, transport, and reuse soil contaminated with low concentrations of lead on state highway rights-of-way for certain maintenance, repair, and construction projects located in Caltrans Districts 4, 6, 7, 8, 10, 11, and 12.

The fraction of excavated soil containing total lead in excess of the total threshold limit concentration (TTLC, 1000 mg/kg) or containing soluble lead in excess of the soluble threshold limit concentration (STLC 5 mg/l) is legally hazardous waste. The DTSC OSA (See Exhibit 3) has determined, however, that this soil can be managed on Caltrans rights-of-way in a manner that will not present a significant threat to human health or the environment. This finding is based on the following conditions, which are also conditions of the variance:

a) Caltrans shall manage all soil contaminated with lead with contaminant concentrations such that it is considered a hazardous waste pursuant to HSC 25117 and 22 CCR, Div 4.5, Chapter 11 as hazardous waste unless the contaminant concentrations and management practices meet the following conditions:

1. Soil containing 500 ug/l extractible lead or less (based on a modified waste extraction test using deionized water as the extractant) and 350 ppm or less total lead may be used as fill provided that the lead-contaminated soil is placed a minimum of five (5) feet above the maximum water table elevation and covered with at least one (1) foot of nonhazardous soil. The limit on total lead within shall be the following: Total parts per million (ppm) lead shall be at or below the statutory limits in effect when the soil is re-used or the risk-based limit of 1496 mg/kg, whichever is less. On the effective date of this variance, HSC section 25157.8 limits total lead concentrations to 350 ppm. That section may be amended and/or expire in the future. Additionally, other parts of relevant statutes may be added or amended in the future to include lead limits applicable to this variance.

2. Soil containing more than 500 ug/l and less than 50 mg/l extractible lead (based on a modified waste extraction test using deionized water as the extractant) and 350 or less ppm total lead may be used as fill provided that the lead-contaminated soils are placed a minimum of five (5) feet above the maximum water table elevation and protected from infiltration by a pavement structure which will be maintained by Caltrans. Caltrans shall comply with the lead limits discussed in paragraph a) 1 above.

3. Contaminated soil with a pH < 5.0 shall only be used as fill soil under the paved portion of the roadway.

b) Caltrans will implement appropriate health and safety procedures to protect its employees and the public, and to prevent or minimize exposure to potentially hazardous substances. A project-specific health and safety plan must be prepared and implemented. The monitoring and exposure standards shall be based on Construction Standards in Title 22, CCR section 1532.1.

c) All lead-contaminated soil that cannot be buried and covered within the same Caltrans corridor from where it originated shall be managed as a hazardous waste.

d) Lead-contaminated soil will not be moved outside the designated corridor boundaries (see paragraph q) below).

e) Lead-contaminated soil shall not be buried in areas where it will be in contact with groundwater or surface water.

f) Lead-contaminated soil shall be buried and covered only in locations that are protected from erosion resulting from storm water run-on and run-off.

g) The lead-contaminated soil shall be buried and covered in a manner that will prevent accidental or deliberate breach of the asphalt, concrete, and/or cover soil.

h) The presence of lead-contaminated soil will be incorporated into the projects' as-built drawings. The as-built drawings shall be annotated with the location, representative analytical data, and volume of lead-contaminated soil. The as-built drawings shall also state the depth of the cover. These as-built drawings shall be retained by Caltrans until its rights-of-way or property ownership are relinquished.

I) Caltrans shall ensure that no other wastes, other than the lead-contaminated soil, are placed in the burial areas.

j) Lead-contaminated soil shall not be buried within ten (10) feet of culverts or locations subject to frequent worker exposure.

k) Excavated lead-contaminated soil not placed into the designated area (fill area, roadbed area) by the end of the working day shall be stockpiled and covered with sheets of polyethylene or at least one foot of non-hazardous soil. The lead-contaminated soil, while stockpiled or under transport, shall be protected from contacting surface water and being dislodged or transported by wind or storm water. The stockpile covers shall be inspected at least once a week and within 24 hours after rainstorms.

l) Caltrans shall ensure that all stockpiling of lead-contaminated soil remains within the specified corridor. Stockpiling of lead-contaminated soil outside the area of contamination is in direct violation of land disposal restrictions and is prohibited.

m) Caltrans shall conduct confirmatory sampling, if appropriate, of any stockpile area after removal of the lead-contaminated soil to ensure that contamination has not been left behind or has not migrated from the stockpiled soil to the surrounding soils. Caltrans shall ensure that test results are kept with Caltrans project records located at the District office or a subsequent permanent location and are available to DTSC upon request.

n) Caltrans shall stockpile lead-contaminated soil only on high ground (i.e. no sump areas or low points) which will not be affected by surface water run-on or run-off.

o) Caltrans shall not stockpile lead-contaminated soil in an environmentally sensitive area.

p) Caltrans shall ensure that run-off which has come into contact with stockpiled lead-contaminated soil will not flow to storm drains, inlets, or waters of the state.

q) Caltrans may move lead-contaminated soil from one Caltrans project to another Caltrans project so long as the lead-contaminated soil remains within the same designated Caltrans corridor. Caltrans shall record this movement of lead-contaminated soil by using a bill of lading. The bill of lading must contain: 1) US DOT description including shipping name, hazard class and ID number; 2) handling codes; 3) quantity of soil; 4) volume of soil; and 5) any specific handling instructions. The bill of lading shall be referenced in and kept on file with the project's as-built drawings. Lead-contaminated soil must be kept covered during transportation.

r) For each specific corridor where this variance is to be implemented, all of the following information will be submitted in writing to DTSC at least five (5) days before construction of any project begins:

1. a plan drawing designating the boundaries of the corridor where lead-contaminated soils will be excavated, stockpiled, buried and covered;

2. a list of the Caltrans projects that the corridor encompasses;

3. a list of Caltrans contractors that will be conducting any phase of work on any project affected by this variance;

4. duration of corridor construction;

5. location where sampling and analytical data used to make lead concentration level determinations are kept (e.g. a particular Caltrans project file);

6. name and phone number (please include area code) of project resident engineer;

7. location where Caltrans and contractor health and safety records are kept;

8. location of project special provisions (including page or section number) for soil excavation, transportation, stockpile, burial and placement of cover soil;

9. location of project drawings (including drawing page number) for soil excavation, burial and placement of cover in plan and cross section (For example, "The project plans are located at the resident engineer's office located at Th and Main Streets, City of Fresno,. See pages xxxx of contract xxxx");

10. If a Caltrans project within the corridor is added, changed or deleted, Caltrans must update the information provided to DTSC five (5) days before construction begins; and

11. The type of environmental document for each project, date of adoption, and where the document is available for review. Prior to finalizing the environmental document for a project, Caltrans shall comply with the following:

A. A copy of Notice of Exemption for any project shall be submitted to the DTSC Headquarters Project Manager within five (5) days of signing.

B. A copy of the initial study and any proposed Negative Declaration or environmental impact report for any project shall be submitted to the DTSC. Headquarters Project

Manager at the beginning of the formal public notice period, the current name, address and phone number can be obtained from the Chief of DTSC's Permitting Division, as specified below.

C. A copy of the Notice of Preparation for any project shall be submitted to DTSC.

s) Changes in location of lead-contaminated soil placement, quantities or protection measures (field changes) will be noted in the resident engineer's project log within five (5) days of the field change.

t) Caltrans shall ensure that field changes are in compliance with the requirements of this variance.

u) If areas subject to the terms of this variance are sold, relinquished or abandoned (including roadways), all future property owners shall be notified in writing in advance by Caltrans of the requirements of this variance, and Caltrans shall provide the owner with a copy of the variance. A copy of such a notice shall be sent to DTSC. and contain the corridor location and project. Caltrans shall also disclose to the new owner the location of areas where lead-contaminated soil has been buried. Future property owners will be subject to the same requirements as Caltrans. DTSC retains the right to modify or revoke this variance pursuant to HSC 25143 upon a change of ownership or at any other time.

Ref: Variance Application

Analysis of Potential Impacts:

In addition to the relatively benign nature of low concentrations of lead in soil, the institutional controls that Caltrans has over the reuse of these soils in the highway construction process and its long term internment within the rights-of-way ensures that there will be minimal chance of its impacting the environment or health and safety of the general population.

Institutional controls include the restriction of access to the freeway/highway area by the use of right-of-way fencing (all freeways have complete right-of-way fencing) and limited access to the freeway. Freeways are, by definition, controlled-access highways in which access is limited to interchanges and on and off-ramp situations. Caltrans is the long-term owner of the freeways and is responsible for long-term maintenance of the freeway facilities. Standard maintenance practices include maintaining the integrity of the roadway surface, drainage structures and landscape features.

Institutional controls are also maintained during the construction process when the lead-contaminated soils are moved and placed in their final locations. The construction process is controlled by a Caltrans issued contract for the construction of a particular project, e.g., roadway widening. Within the contract are standard provisions for directing how and to what standards the contractor will be held during the construction of the facility. In addition to the standard specifications, specific special provisions in each are placed in the contract to deal with specific and unique issues for a particular project. The reuse of lead-contaminated soils within the project limits will require special provisions directing the contractor to take specific actions as a result of the use of these soils.

Ref: Variance Application

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	*[X]*	***G***

15. Aesthetics

Description of Environmental Setting:

The implementation of the allowed variance activities (reuse of lead-contaminated soil) will not obstruct any scenic vistas or create offensive sites. The activities allowed by the variance will be implemented on existing freeway corridors where construction projects will be completed to widen roads, add lanes, change interchange configurations, add Park & Ride facilities and install pumping plant facilities to control surface drainage.

Ref: Variance Application

Analysis of Potential Impacts:

The variance to allow reuse of lead-contaminated soil is not anticipated to have significant impacts to the over Caltrans project. Additionally, each individual reuse project will be assessed separately for any potential impacts to visual quality.

Ref: Variance Application

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	*[X]*	***G***

16. Cultural/Paleontological Resources

Description of Environmental Setting:

Since the variance activities will be conducted in concert with projects that are either lane widenings, additions of lanes in freeway medians, or interchange modifications that will be located in existing developed rights-of-way, it is unlikely that there will be any impacts to archaeological or paleontological sites.

Ref: Variance Application

Analysis of Potential Impacts:

No significant impact to archaeological or paleontological sites on these existing developed rights-of ways are anticipated. Any effects to these resources will be addressed specifically when the project description and CEQA analysis for each individual reuse project is being developed by Caltrans.

Ref: Variance Application

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	***G***	*[X]*

17. Cumulative Effects

Description of Environmental Setting:

All activities allowed by this variance will be conducted within existing highway rights-of-way transportation corridors located in various areas of Caltrans Districts 4,6, 7, 8, 11, and 12. The variance will allow Caltrans to excavate, stockpile, transport, and reuse soil contaminated with low concentrations of aerially-deposited lead in these locations.

Ref: Variance Application

Analysis of Potential Impacts:

Based on project design, the conditions of the DTSC variance, and the Caltrans institutional controls, the activities of this variance will not create a significant impact individually or cumulatively. Please refer specifically to Items 2 (Air), 3 (Water), and 14 (Public Health and Safety).

Although there are no anticipated cumulative impacts, and as explained in the Project Description, each individual reuse project will undergo a specific environmental review during that project's approval phase.

Ref: Variance Application

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	*[X]*	***G***

18. Population/Housing/Recreation

Description of Environmental Setting:

The project consists of the reuse of lead-contaminated soil during construction activities on existing, state owned rights-of-way for the Caltrans. No changes to existing rights-of-way that would impact local needs for housing or recreation are being proposed.

Ref: Variance Application

Analysis of Potential Impacts:

No impacts on population, housing needs or recreation needs associated with the issuance of this variance are foreseen.

Ref: Variance Application

Findings:

Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
G	***G***	***G***	*[X]*

19. Mandatory Findings of Significance

		Potentially Significant Impact	*Potentially Significant Unless Mitigated*	*Less Than Significant Impact*	*No Impact*
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	***G***	***G***	***G***	*[X]*
b)	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	***G***	***G***	***G***	*[X]*
c)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	***G***	***G***	***G***	*[X]*
d)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	***G***	***G***	***G***	*[X]*

V. DETERMINATION OF DE MINIMIS

On the basis of this Special Initial Study:

[X] I find that there is no evidence before DTSC that the proposed project will have a potential for an adverse effect on wildlife resources or the habitat upon which the wildlife depend. A NEGATIVE DECLARATION with a DE MINIMIS IMPACT FINDING will be prepared.

VI. DETERMINATION OF SIGNIFICANT EFFECT

On the basis of this Initial Study:

[X] I find that the proposed project COULD NOT have a significant effect on the environment. A NEGATIVE DECLARATION will be prepared.

G I find that although the proposed project COULD HAVE a significant effect on the environment, mitigation measures have been added to the project which would reduce these effects to less than significant levels. A NEGATIVE DECLARATION will be prepared.

G I find that the proposed project COULD HAVE a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.

_____ _____
Name of Preparer Title

_____ _____
Signature of Preparer Date

ATTACHMENT A
SPECIAL
INITIAL STUDY
REFERENCE LIST
for
Variance
Caltrans Districts XXXX

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1. Ref: Variance Application